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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known

Application Number	09/800,530
Filing Date	03/06/2001
First Named Inventor:	Edward L. Schwartz
Art Unit	2621
Examiner Name	Ishrat I. Sherali
Attorney Docket Number	074451.P127D10

Sheet 1 of 8

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)				
IS		US-	3,580,655	5/25/1971	Leith et al.	
IS		US-	3,950,103	4/13/1976	Schmidt-Weinmar	
IS		US-	4,136,954	1/30/1979	Jamieson	
IS		US-	4,155,097	5/15/1979	Lux	
IS		US-	4,190,861	2/26/1980	Lux	
IS		US-	4,223,354	9/16/1980	Noble et al.	
IS		US-	4,393,456	7/12/1983	Marshall, Jr.	
IS		US-	4,437,087	3/13/1984	Petr	
IS		US-	4,569,075	2/4/1986	Nussbaumer	
IS		US-	4,599,567	7/8/1986	Goupillaud et al.	
IS		US-	4,652,881	3/24/1987	Lewis	
IS		US-	4,663,660	5/5/1987	Fedele et al.	
IS		US-	4,674,125	6/16/1987	Carlson et al.	
IS		US-	4,701,006	10/20/1987	Perlmutter	
IS		US-	4,751,742	6/14/1988	Meeker	
IS		US-	4,760,563	7/26/1988	Beylkin	
IS		US-	4,785,348	11/15/1988	Fonsalas et al.	
IS		US-	4,785,349	11/15/1988	Keith et al.	
IS		US-	4,799,179	1/17/1989	Masson et al.	
IS		US-	4,805,129	2/14/1989	David	
IS		US-	4,815,023	3/21/1989	Arbeiter	
IS		US-	4,817,182	3/28/1989	Adelson et al.	
IS		US-	4,821,223	4/11/1989	David	
IS		US-	4,827,336	5/2/1989	Acampora et al.	
IS		US-	4,829,378	5/9/1989	Le Gall	
IS		US-	4,837,517	6/6/1989	Barber	
IS		US-	4,839,889	6/13/1989	Gockler	
IS		US-	4,858,017	8/15/1989	Torbey	
IS		US-	4,864,398	9/5/1989	Avis et al.	
IS		US-	4,868,868	9/19/1989	Yazu et al.	
IS		US-	4,881,075	11/14/1989	Weng	
IS		US-	4,894,713	1/16/1990	Delogne et al.	
IS		US-	4,897,717	1/30/1990	Hamilton et al.	
IS		US-	4,899,147	2/6/1990	Schiavo et al.	
IS		US-	4,904,073	2/27/1990	Lawton et al.	
IS		US-	4,918,524	4/17/1990	Ansari et al.	
IS		US-	4,922,544	5/1/1990	Stansfield et al.	
IS		US-	4,929,223	5/29/1990	Walsh	
IS		US-	4,929,946	5/29/1990	O'Brien et al.	
IS		US-	4,936,665	6/26/1990	Whitney	
IS		US-	4,973,961	11/27/1990	Chamzas et al.	
IS		US-	4,974,187	11/27/1990	Lawton	
IS		US-	4,982,283	1/1/1991	Acampora	

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15		us-	4,985,927	1/15/1991	Norwood et al.		
		us-	4,987,480	1/22/1991	Lippman et al.		
		us-	4,999,705	3/12/1991	Puri		
		us-	5,000,183	3/19/1991	Bonnefous		
		us-	5,001,764	3/19/1991	Wood et al.		
		us-	5,014,134	5/7/1991	Lawton et al.		
		us-	5,018,210	5/21/1991	Merryman et al.		
		us-	5,049,992	9/17/1991	Citta et al.		
		us-	5,049,993	9/17/1991	Le Gall et al.		
		us-	5,068,911	11/26/1991	Resnikoff et al.		
		us-	5,072,308	12/10/1991	Lin et al.		
		us-	5,073,964	12/17/1991	Resnikoff		
		us-	5,081,645	1/14/1992	Resnikoff et al.		
		us-	5,095,447	3/10/1992	Manns et al.		
		us-	5,097,261	3/17/1992	Langdon, Jr. et al.		
		us-	5,097,331	3/17/1992	Chen et al.		
		us-	5,101,280	3/31/1992	Moronaga et al.		
		us-	5,101,446	3/31/1992	Resnikoff et al.		
		us-	5,103,306	4/7/1992	Weiman et al.		
		us-	5,109,451	4/28/1992	Aono et al.		
		us-	5,121,191	6/9/1992	Cassereau et al.		
		us-	5,124,930	6/23/1992	Nicholas et al.		
		us-	5,128,757	7/7/1992	Citta et al.		
		us-	5,128,791	7/7/1992	Le Gall et al.		
		us-	5,148,498	9/15/1992	Resnikoff et al.		
		us-	5,152,953	10/6/1992	Ackermann		
		us-	5,156,943	10/20/1992	Whitney		
		us-	5,173,880	12/22/1992	Duren et al.		
		us-	5,182,645	1/26/1993	Breeuwer et al.		
		us-	5,223,926	6/29/1993	Stone, et al.		
		us-	5,235,434	8/10/1993	Wober		
		us-	5,241,395	8/31/1993	Chen		
		us-	5,262,958	11/16/1993	Chui et al.		
		us-	5,276,525	1/4/1994	Gharavi		
		us-	5,315,670	5/24/1994	Shapiro		
		us-	5,321,776	6/14/1994	Shapiro		
		us-	5,335,016	8/2/1994	Nakagawa		
		us-	5,347,479	9/13/1994	Miyazaki		
		us-	5,349,348	9/20/1994	Anderson et al.		
		us-	5,379,355	1/3/1995	Allen		
		us-	5,381,145	1/10/1995	Allen et al.		
		us-	5,384,869	1/24/1995	Wilkinson et al.		
	15		us-	5,412,741	5/2/1995	Shapiro	

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15		us-	5,414,780	5/9/1995	Camahan	
		us-	5,416,604	5/16/1995	Park	
		us-	5,420,891	5/30/1995	Akansu	
		us-	5,453,945	9/26/1995	Tucker et al.	
		us-	5,455,874	10/3/1995	Ormsby et al.	
		us-	5,481,308	1/2/1996	Hartung et al.	
		us-	5,495,292	2/27/1996	Zhang et al.	
		us-	5,497,435	3/5/1996	Berger	
		us-	5,511,151	4/23/1996	Russell et al.	
		us-	5,534,925	7/9/1996	Zhong	
		us-	5,537,493	7/16/1996	Wilkinson	
		us-	5,541,594	7/30/1996	Huang et al.	
		us-	5,442,458	8/15/1995	Rabbani et al.	
		us-	5,546,477	8/13/1996	Knowles et al.	
		us-	5,563,960	10/8/1996	Shapiro	
		us-	5,566,089	10/15/1996	Hoogenboom	
		us-	5,602,589	2/11/1997	Vishwanath et al.	
		us-	5,631,977	5/20/1997	Koshi	
		us-	5,638,498	6/10/1997	Tyler et al.	
		us-	5,657,085	8/12/1997	Katto	
		us-	5,701,367	12/23/1997	Koshi et al.	
		us-	5,717,789	2/10/1998	Anderson, et al.	
		us-	5,754,793	5/19/1998	Eom et al.	
		us-	5,808,683	9/15/1998	Tong et al.	
		us-	5,809,176	9/15/1998	Yajima	
		us-	5,850,482	12/15/1998	Meany et al.	
		us-	5,867,602	2/2/1999	Zandi et al.	
		us-	5,880,856	3/9/1999	Ferriere	
		us-	5,966,465	10/12/1999	Keith et al.	
		us-	6,020,975	2/1/2000	Chen et al.	
		us-	6,026,198	2/15/2000	Okada	
		us-	6,088,062	7/11/2000	Kanou et al.	
		us-	6,101,279	8/8/2000	Nguyen et al.	
		us-	6,118,902	9/12/2000	Knowles	
		us-	6,121,970	9/19/2000	Guedalia	
		us-	6,128,413	10/3/2000	Benamara	
		us-	6,160,846	12/12/2000	Chiang	
		us-	6,201,897 B1	3/13/2001	Nixon	
		us-	6,229,929 B1	5/8/2001	Lynch et al.	
		us-	6,236,765 B1	5/22/2001	Archarya	
		us-	6,237,010 B1	5/22/2001	Hui et al.	
		us-	6,263,109 B1	7/17/2001	Ordentlich et al.	
	15	us-	6,263,120 B1	7/17/2001	Matsuoka	

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<b>Art Unit</b>	2621
<b>Examiner Name</b>	Ishrat I. Sherali
<b>Attorney Docket Number</b>	074451.P127D10

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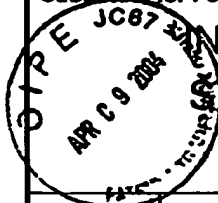
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## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T*
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
IS		EPO	0510933 A1		10/28/1992	Canon Kabushiki Kaisha		
		EPO	0593013 A2		4/20/1994	Kabushiki Kaisha Toshiba		
		EPO	0611051 A1		8/17/1994	Canon Kabushiki Kaisha		
		EPO	0622741 A2		11/2/1994	Klics, Ltd.		
		EPO	0967556 A2		12/29/1999	Hewlett-Packard Co.		
		EPO	1035511 A2		9/13/2000	Canon Kabushiki Kaisha		
		EPO	1164781 A1		12/19/2001	Matsushita Electric Ind. Co., Ltd		
		EPO	701375 A2		3/13/1996	Xerox Corporation		
		JP	06-245077		9/2/1994	Nec Corp.		
		JP	406038193 A		7/17/1992	Casio Computer Co. Ltd.		
		JP	6-350989		12/22/1994	Fuji Photo Film Co. Ltd.		
		JP	7-79350		3/20/1995	Fuji Photo Film Co. Ltd.		
		PCT WO	00/49571		8/24/2000	Digital Accelerator Corp.		
		PCT WO	01/16764 A1		3/8/2001	Rtimage Inc.		
		PCT WO	88/10049		12/15/1988	Eastman Kodak Co.		
		PCT WO	91/03902		3/21/1991	Aware, Inc.		
		PCT WO	91/18361		11/28/1991	Yale University		
		PCT WO	93/10634		5/27/1993	General Electric Co.		
		PCT WO	94/17492		8/4/1994	David Samoff Research Ctr., Inc.		
		PCT WO	94/23385		10/13/1994	Lewis, Adrian		
		PCT WO	95/19683		7/20/1995	Houston Advanced Research Ctr.		
		PCT WO	96/09718		3/28/1996	Houston Advanced Research Ctr.		
		UK GB	2 211 691 A		7/5/1989	Hitachi Ltd.		
		UK GB	2 284 121 A		5/24/1995	State of Israel- Ministry of Defence		
		UK GB	2 285 374 A		7/5/1995	Ricoh Company Ltd.		
		UK GB	2 293 733 A		4/3/1996	Ricoh Company Ltd.		
		UK GB	2 293 734 A		4/3/1996	Ricoh Company Ltd.		
		UK GB	2 303 030 A		2/5/1997	Ricoh Company Ltd.		
		UK GB	2 303 031 A		2/5/1997	Ricoh Company Ltd.		
		UK GB	2 341 035 A		3/1/2000	Ricoh Company Ltd.		

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NON PATENT LITERATURE DOCUMENTS

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Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
IS		ANTONINI, et al., "Image Coding Using Wavelet Transform", <u>IEEE Transactions on Image Processing</u> , Vol 1, No. 2, April 1992, pp. 205-220.	
		BLUMBERG, et al., "Visual Realism and Interactivity for the Internet", IEEE, 1997, pp. 269-273.	
		BOLIEK, et al., "Decoding compression with reversible embedded wavelets (CREW) codestreams", <u>Journal of Electronic Imaging</u> , July 1998, vol. 7 (3), pp. 402-409.	
		BOLIEK, et al., "JPEG 2000 for Efficient Imaging in a Client/Server Environment", <u>Proceeding of the PIE, SPIE, Bellingham, VA, US</u> , Vol. 4472, July 31, 2001, pp. 212-223, XP008010308.	
		BOLIEK, et al., "JPEG 2000 Next Generation Image Compression System", IEEE 0-7803-6297, 45-48	
		CALDERBANK, et al., "Wavelet Transforms That Map Integers to Integers", August 1996.	
		CAREY, et al: "Regularity-Preserving Image Interpolation", <u>IEEE Transactions on Image Processing</u> , Vol. 8., No. 9, September 1999, pgs. 1293-1297, XP002246254.	
		CARRATO, et al: "A Simple Edge-Sensitive Image Interpolation Filter", <u>Proceedings of the International Conference on Image Processing (ICIP) Lausanne, Sept. 16-19, 1996, New York, IEEE, US</u> , vol. 1, pgs. 711-714, XP010202493.	
		CHEN, et al., "Wavelet Pyramid Image Coding with Predictable and Controllable Subjective Picture Quality", <u>IEICE Trans. Fundamentals</u> , Vol. E76-A., No. 9, September 1993, pp. 1458-1468.	
		CHEONG, et al., "Subband Image Coding with Biorthogonal Wavelets", <u>IEICE Trans. Fundamentals</u> , Vol. E75-A., No. 7, July 1992, pp. 871-881.	
		CHRYSAFIS, et al., "An Algorithm for Low Memory Wavelet Image Compression", IEEE 0-7803-5467-2/99, pg. 354-358.	
		CHRYSAFIS, et al., "Line Based Reduced Memory, Wavelet Image Compression," <u>Data Compression Conference, 1998, DCC '98, Proceedings Snowbird, UT, March 1998</u> , pgs. 398-407.	
		CHUI, et al., "Wavelets on a Bounded Interval", <u>Numerical Methods of Approximation Theory</u> , Vol. 9, 1992, pg. 53-75.	
		CROCHIERE, et al., "Digital Coding of Speech in Sub-bands", 1976, <u>American Telephone and Telegraph Company, The Bell System Technical Journal</u> , Vol. 55, No. 8, October 1976, p. 1069-1085.	
		DENK, et al., "Architectures for Lattice Structure Based Orthonormal Discrete Wavelet Transforms", IEEE, 1994, pp. 259-270.	
		DESHPANDE, et al., "HTTP Streaming of JPEG2000 Images", IEEE, 2001, pp.15-19.	
		Dutch Search Report, 133082, 11/26/96.	
		ESTEBAN, et al., "1977 IEEE International Conference on Acoustics, Speech & Signal Processing", "Application of Quadrature Mirror Filters to Split Band Voice Coding Schemes", p. 191-195.	
		French Search Report, FR9511023, 11/26/96.	
		French Search Report, FR9511024, 11/26/96.	
		German Search Report, Dated March 21, 1997, 3 pages.	
IS		GHARAVI, et al., "Proceedings: ICASSP 87", 1987 <u>International Conference on Acoustics, Speech, and Signal Processing</u> , April 6, 7, 8, 9, 1987, Volume 4 of 4, "Application of Quadrature Mirror Filtering to the Coding of Monochrome and Color Images", p. 2384-2387.	

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15		GHARAVI, et al., "Sub-band Coding of Digital Images Using Two-Dimensional Quadrature Mirror Filtering", SPIE Vol. 707 Visual Communications and Image Processing, 1986, p. 51-61.	
		GORDON, BENJAMIN M., et al., "A 1.2 mW Video-Rate 2-D Color Subband Decoder," IEEE Journal of Solid-State Circuits, IEEE Inc. New York, Vol. 30, No. 12, Dec. 1, 1995, pgs. 1510-1516.	
		HAUF, et al., "The FlashPix™ Image File Format", The Fourth Color Imaging Conference: Color Science, Systems and Application, 1996, pp. 234-238.	
		HOWARD, et al., "Fast and Efficient Lossless Image Compression", IEEE, 1993, pp. 351-360.	
		Information Technology - JPEG 2000 Image Coding System - Part 1: Core Coding System, ISO/IEC 15444-1, 12/15/2000, pg. 5, 14, 22.	
		International Search Report for Application No.: GB 9518298.6, dated 8. November 1995.	
		JPEG 2000 Part 1 Final Committee Draft Version 1.0, Image Compression Standard described in ISO/IEC 1/SC 29/WG 1 N1646, 16 March 2000.	
		KOMATSU, et al., "Reversible Subband Coding of Images", SPIE Vol. 2501, pp. 676-648..	
		LANGDON, JR., "Sunset: A Hardware-Oriented Algorithm for Lossless Compression of Gray Scale Images", SPIE Vol. 1444, Image Capture, Formatting, and Display, 1991, pp. 272-282.	
		LE GALL, et al., "Sub-band coding of Digital Images Using Symmetric Short Kernel Filters and Arithmetic Coding Techniques", 1988, International Conference on Acoustics, Speech and Signal Processing, pp. 761-764.	
		LEWIS, et al., "Image Compression Using the 2-D Wavelet Transform", IEEE Transactions on Image Processing, Vol. 1, No. 2, April 1992, pp. 244-250.	
		LUX, P., "A Novel Set of Closed Orthogonal Functions for Picture Coding", 1977, pp. 267-274.	
		MARCELLIN, et al., "An Overview of JPEG-2000", Proceedings. DCC 2000 Snowbird, UT, USA, March 28-30, 2000, pp. 523-541, XP010377392.	
		MENG, TERESA H., "A Wireless Portable Video-on-Demand System," VLSI Design, 1998, Proceedings Eleventh International Conference on Chennai, India 407, Jan. 1998, California, pgs. 4-9.	
		OHTA, et al., "Wavelet Picture Coding with Transform Coding Approach", July 1992, No. 7, pp. 776-784.	
		PADMANABHAN, et al., "Feedback-Based Orthogonal Digital Filters", IEEE Transactions on Circuits and Systems, 8/93, No. 8, pp. 512-525.	
		POLLARA et al., "Rate-distortion Efficiency of Subband Coding with Integer Coefficient Filters", 7/1994, pg. 419, Information Theory, 1994, IEEE	
		REEVES, et al: "Multiscale-Based Image Enhancement", Electrical and Computer Engineering, 1997. Engineering Innovation: Voyage of Discovery. IEEE 1997 Canadian Conference on St. Johns, NFLD., Canada May 25-28, 1997, New York, NY. (pgs. 500-503), XP010235053	
		REUSENS, "New Results in Subband/Wavelet Image Coding", 5/1993, pg. 381-385.	
		SAID, et al., "Image Compression Using the Spatial-Orientation Tree", IEEE, 1993, pp. 279-282.	
15		SAID, et al., "Reversible Image Compression Via Multiresolution representation and Predictive Coding", 8/11/93, pp. 664-674.	

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/800,530
Filing Date	03/06/2001
First Named Inventor:	Edward L. Schwartz
Art Unit	2621
Examiner Name	Ishrat I. Sherali
Attorney Docket Number	074451.P127D10

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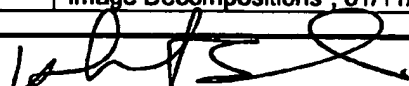
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## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
15		SHAH, et al., "A Chip Set for Lossless Image Compression", <u>IEEE Journal of Solid-State Circuits</u> , Vol. 26, No. 3, March 1991, pp. 237-244.
		SHAPIRO, J. M., "An Embedded Hierarchical Image Coder Using Zerotrees of Wavelet Coefficients", <u>IEEE</u> , 1993, pp. 214-223.
		SHAPIRO, J. M., "Embedded Image Coding Using Zerotrees of Wavelet Coefficients", <u>IEEE Transactions on Signal Processing</u> , 12/93, No. 12, pp. 3445-3462.
		SMITH, et al., "Exact Reconstruction Techniques for Tree-Structured Subband Coders", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol ASSP-34, No. 3, June 1986, pp. 434-441.
		STOFFEL, et al: "A Survey Of Electronic Techniques For Pictorial Image Reproduction," <u>IEEE Transactions On Communications</u> , vol. COM-29, no. 12, December 1981, pp. 1898-1925, XP000560531 IEEE, New York (US).
		SZU, et al., "Image Wavelet Transforms Implemented by Discrete Wavelet Chips", <u>Optical Engineering</u> , July 1994, Vol. 33, No. 7, pp.2310-2325.
		VETTERLI, Martin, "Filter Banks Allowing Perfect Reconstruction", <u>Signal Processing</u> 10 (1986), pp. 219-244.
		VETTERLI, Martin, "Multi-Dimensional Sub-band Coding: Some Theory and Algorithms", <u>Signal Processing</u> 6 (1984) pp. 97-112.
		VILLASENOR, et al., "Filter Evaluation and Selection in Wavelet Image Compression", <u>IEEE</u> , 1994, pp. 351-360.
		WESTERNICK, et al., "Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 3 of 4, "Sub-band coding of Images Using Predictive Vector Quantization", p. 1378-1381.
		WOODS, "Subband Image Coding", 1991, pages 101-108, 163-167, and 180-189.
		WOODS, et al., "Subband Coding of Images", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol. 1 ASSP-34, No. 5, October 1986, pp. 1278-1288.
		WOODS, et al., "Sub-band coding of Images", <u>Proceedings ICASSP 86</u> , Tokyo, Japan, April 1986, p. 1005-1008.
		WU, et al., "New Compression Paradigms in JPEG2000", <u>Applications of Digital Image Processing XXIII</u> , San Diego, CA USA, July 31-Aug 3, 2000, vol. 4115, pp. 418-429, XP008013391, <u>Proceedings of the SPIE - The International Society for Optical Engineering</u> , 2000, SPIE-Int. Soc. Opt. Eng., USA.
18		XIONG, et al., "Joint Optimization of Scalar and Tree-structured Quantization of Wavelet Image Decompositions", 01/11/93, pp. 891-895.

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